ABSTRACT OF THE DISCLOSURE

A method and apparatus for omni-directional image and 3-dimensional data acquisition with data annotation and dynamic rage extension method is capable of omni-directionally photographing, acquiring 3-dimensional images photographed by cameras having each different exposure amount in connection with the direction of height of an object, extending dynamic range, and generating an geographical information by entering an annotation such as photographing location and time into the photographed images, which can be connected with other geographical information system database. The apparatus comprises one or more multi camera module(s) which are stacked and formed multi layers in the direction of height for acquiring 3-dimensional images and extending dynamic range of the 3-dimensional images, wherein each multi camera module includes a plurality of cameras symmetrically arranged with a specific point in a plane. Further, the multi camera modules of the apparatus is connected to a computer vision system in order to control of photographing and to store the photographed images, and is capable of mounting on a mobile means.